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PATENT
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PENDING CLAIMS

1. (Twice Amended) An isolated dermal sheath tissue and/or a cell derived therefrom comprising at least one selected gene, or functional fragment thereof, and wherein said at least one selected gene, or functional fragment thereof can be delivered to a target site when said dermal sheath tissue is part of a gene therapy vehicle.
2. (Twice Amended) A gene therapy vehicle for delivering at least one selected gene, or functional fragment thereof, to a target site wherein said gene therapy vehicle comprises isolated dermal sheath tissue and/or a cell derived therefrom.
3. (Twice Amended) The dermal sheath tissue or a cell derived therefrom of Claim 1 wherein said dermal sheath tissue or cell is derived from the lower portion of a hair follicle.
4. (Twice Amended) The dermal sheath tissue or a cell derived therefrom of Claim 3 wherein said dermal sheath tissue or cell is derived from a lower third of said hair follicle.
5. (Twice Amended) The dermal sheath tissue or a cell derived therefrom of Claim 3 wherein said dermal sheath tissue or said cell is derived from a segment or ring of a combination of follicle/tissue cells.
6. (Twice Amended) A gene therapy vehicle according to Claim 2 which is engineered by recombinant techniques so as to include at least one insertion site into which at least one selected gene can be placed.
7. (Twice Amended) A gene therapy vehicle according to Claim 6 wherein said selected gene is inserted into said gene therapy vehicle so that the expression of said selected gene results in the provision of the corresponding protein product.

8. (Amended) A gene therapy vehicle according to Claim 7 wherein said vehicle is provided with multiple insertion sites to carry multiple genes and wherein when said genes are expressed said gene therapy vehicle provides for the delivery of multiple proteins.
11. (Twice Amended) A gene therapy vehicle according to Claim 2 wherein said selected gene for insertion is inserted in frame with the genome of the gene therapy vehicle so as to provide for correct expression of said selected gene.
12. (Twice Amended) A gene therapy vehicle according to Claim 2 further comprising a promoter wherein said selected gene is under the transcriptional control of said promoter.
13. (Twice Amended) A gene therapy vehicle according to Claim 12 wherein said promoter is an inducible promoter.
14. (Twice Amended) A gene therapy vehicle according to Claim 12 wherein said promoter is a constitutive promoter.
15. (Twice Amended) A vector comprising the gene therapy vehicle of Claim 2 wherein said vector is further comprises
- (i) at least one insertion site for at least one selected gene, or functional fragment thereof, and
 - (ii) other expression control elements for ensuring that once the vector infects or penetrates said tissue and/or cells of said gene therapy vehicle, expression of said selected gene can take place.
16. (Amended) A therapeutic composition comprising a suitable carrier and the gene therapy vehicle according to Claim 2.

17. (Amended) A therapeutic composition according to Claim 16 wherein said composition has anti-bacterial properties.
18. (Amended) A therapeutic composition according to Claim 16 wherein said composition has anti-septic properties.
19. (Twice Amended) A therapeutic composition according to Claim 16 wherein said composition further comprises growth promoting additives.
20. (Twice Amended) A therapeutic composition according to Claim 16 wherein said composition further comprises at least one anaesthetic.
21. (Twice Amended) A therapeutic composition according to Claim 16 for topical application wherein said therapeutic composition is provided in a suitable carrier solution, gel, cream, or emollient.
22. (Twice Amended) A therapeutic composition according to Claim 16 wherein said therapeutic composition comprises a carrier solution as said carrier.
23. (Twice Amended) A therapeutic appliance that comprises a therapeutic composition according to Claim 16 wherein said carrier is incorporated and/or embedded therein, and/or attached thereto, a plaster or bandage.
24. (Twice Amended) A gene therapy vehicle for use in delivering a selected gene, or functional fragment thereof, to a given site wherein said gene therapy vehicle comprises dermal sheath tissue and/or a cell derived therefrom, which tissue and/or cells comprise heterologous genetic material and which, in vivo, said dermal sheath tissue and/or cell differentiate to provide at least one differentiated tissue type.

25. (Twice Amended) A gene therapy vehicle according to Claim 24 which acts as a wound healing system.
26. (Twice Amended) A wound healing system comprising a suitable matrix material having incorporated and/or embedded therein, and/or attached thereto, a gene therapy vehicle according to Claim 24.
27. (Amended) A wound healing system according to Claim 26 wherein said matrix material comprises native collagen.
28. (Twice Amended) A wound healing system according to Claim 26 wherein said matrix material comprises collagenous gels or lattices constructed from reconstituted collagen.
29. (Twice Amended) A wound healing system according to Claim 28 wherein said matrix material comprises components from an extra cellular matrix.
30. (Amended) A wound healing system according to Claim 29 comprising a surgical dressing.
31. (Twice Amended) A wound healing system according to Claim 30 for treatment of acute, and/or chronic, and/or minor, and/or severe, wound healing.
32. (Amended) A wound healing system according to Claim 31 for use in the treatment of cartilage repair, and/or bone repair, and/or muscle repair, and/or connective tissue repair, and/or blood vessel repair.
33. (Amended) A wound healing system according to Claim 32 wherein said system comprises a plurality of cell types from a hair follicle.

34. (Twice Amended) A wound healing system according to Claim 33 wherein one of said cell types, in addition to said dermal sheath tissue, and/or said cell derived therefrom, comprises dermal papilla tissue.

35. (Amended) A therapeutic composition according to Claim 16 wherein said composition comprises a plurality of cell types from a hair follicle.

36. (Twice Amended) A therapeutic composition according to Claim 34 wherein one of said cell types, in addition to said dermal sheath tissue, and/or said cell derived therefrom, comprises dermal papilla tissue.